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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/414,507	10/08/1999	RYUICHI SHIOHARA	Q56144	3387

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2100 PENNSYLVANIA AVE. NW
WASHINGTON, DC 20037-3213

EXAMINER

TRAN, NHAN T

ART UNIT	PAPER NUMBER
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2622

MAIL DATE	DELIVERY MODE
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12/20/2006

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/414,507

Applicant(s)

SHIOHARA ET AL.

Examiner

Nhan T. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/8/2006 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1-32 have been considered but are moot in view of a new ground of rejection (a new interpretation of claimed invention).

The Applicant states that Ozawa does not teach the amended limitations to the first communication, which relates to a transmission of a program recorded on the external recording medium, as agreed by the Examiner in the interview. However, upon further consideration, all claims recites the word "comprising:" which renders the claims open-ended without necessity for operation steps to be considered in order. Thus, the interpretation of the claimed invention does not need to follow any order of claimed operation steps, as long as all limitations of the claims are met. In view of the above, claims 1, 2, 5-12, 15-26, 29 & 30 are still anticipated by Ozawa et al. in view of a new interpretation of the claimed invention as set forth below.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, 5-12, 15-26, 29 & 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Ozawa et al. (US 6,115,137).

Regarding claim 1, Ozawa discloses a function appending method (appending a print data conversion software sent from a printer shown in Figs. 5 & 6) for a digital camera (10) which records image data by converting an image pickup light photoelectrically (see Figs. 1 & 2; col. 4, line 55 – col. 5, line 10), comprising:

transmitting a request-to-send program command (Fig. 5, step S2) to the external recording medium (col. 6, lines 34-35, in which the CPU 20 of the digital camera 10 sends a request-to-send program command to the printer 12 to request a print data conversion software);

waiting for a program transmitting command (Fig. 5, step S3) from an external recording medium (col. 6, lines 35-36, in which the camera waits for a transmitting command from the printer to tell the camera that the printer 12 is ready to immediately

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start transmitting a program), wherein the program transmitting command is the first communication, which is between the digital camera and the external recording medium and which relates to a transmission of a program recorded on the external recording medium (note that since step S3 is the first step **directly related** to a transmission of print data conversion software between the digital camera and the printer, step S3 is considered as the first communication directly related to the program transmission. This is true by the loop NO at step S3. If the printer is not ready to transmit the program to the camera, there is certainly no program transmission. Thus, step S3 is relevant as the first communication **related** to the transmission of the program in consistent with the claimed limitations);

receiving the program transmitting command from the external recording medium (also at step S3, the program transmitting command from the printer is received by the camera);

receiving a program (step S4) recorded on the external recording medium connected to the digital camera exchangeably;

storing the program (step S5) into a recording medium (flash memory 26) provided in the digital camera (col. 6, lines 44-48);

reading the program from the recording medium in the digital camera at a desired time; and executing the program (see Fig. 5, step S6, col. 6, lines 46-56 and it should be noted that "a desired time" is the time when the CPU reads the program for executing)

Regarding claim 2, all limitations of claim 2 are also met by the analysis of claim 1. Furthermore, Ozawa also discloses a communication line (a USB or IEEE1394 cable) between the digital camera (10) and the printer (12) for communicating and transferring data as shown in Fig. 26 and col. 17, lines 7-15.

Regarding claims 5 & 6, it is clear in Ozawa that the program is a print image data generating program (see col. 6, lines 33-43).

Regarding claims 7 & 8, also disclosed is that the program is a communication program. It is noted that a print conversion software for converting image data into print data and transmitting the print data to the printer for printing, which is also known as a print driver program as described in col. 1, lines 55-57. Since the printer only understands the image data associated with printing mode, i.e., HQ mode, after the execution of the print conversion software for converting and outputting the image data to the printer as described in steps S6-S13 in Fig. 5 and S24-S31 in Fig. 6, the program is a communication program for the digital camera and the printer to commonly understand the image data and printing mode selected.

Regarding claim 9 & 10, Ozawa also clearly discloses that the image data is recorded on the recording medium (flash memory 26 shown in Fig. 2) in the digital camera (see col. 4, lines 60-61).

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Regarding claims 11 & 12, all limitations of claims 11 & 12 are also met by the analyses of claims 1 & 2, respectively. Additionally, Ozawa discloses "external program reception unit" as the communication interface 16 (either wireless as shown in Fig. 2 or wire as shown in Fig. 26) in combination with CPU 20, and "execution control unit" as the CPU 20 as shown in Fig. 2.

Regarding claims 15 & 16, see the analyses of claims 5 & 6, respectively. Furthermore, Ozawa discloses print data transmitting means (infrared ray communication 16 shown in Fig. 2 or USB serial port shown in Fig. 26) for transmitting the print image data generated by executing the program to a printing device (see col. 6, line 66 – col. 7, line 9 and col. 17, lines 7-16).

Regarding claims 17 & 18, see the analyses of claims 7 & 8, respectively, wherein "a terminal device" is a printer.

Regarding claims 19 & 20, see the analyses of claims 9 & 10, respectively.

Regarding claims 21-24, it is clear that the recording medium is a flash memory (26). See Fig. 2 and col. 4, lines 60-61 and col. 5, lines 2-3.

Regarding claims 25 & 26, it is also clear that the communication line (i.e., USB cable) is external to the digital camera (10) and connected to the external device (12). See Fig. 26 and col. 17, lines 7-16.

Regarding claims 29 & 30, all limitations of claims 29 & 30 are also met by the analyses of claims 25 & 26, respectively.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3, 4, 13, 14, 27, 28, 31 & 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ozawa et al. (US 6,115,137) in view of Ogawa Yasuyuki et al. (JP 09-046577).

Regarding claims 3 & 4, Ozawa is silent about deleting a desired program from recording medium in the digital camera. However, as taught by Yasuyuki, a printer driver is downloaded to a digital camera (Fig. 1; 10-a) from an external device so as to enable the user to perform direct printing of captured image data (see Fig. 4 and [0023]). Yasuyuki further teaches that the printer driver can be eliminated from the camera memory for saving memory space (see [0024]).

Therefore, it would have been obvious to one of ordinary skill in the art to configure the digital camera in Ozawa in view of the teaching of Yasuyuki to include a deleting feature for deleting a program from the camera memory so as to save memory space for capturing more images.

Regarding claims 13 & 14, all limitations of claims 13 & 14 are also met by the analyses of claims 3 & 4, respectively.

Regarding claims 27 & 31, although Ozawa does not explicitly teach that the printing program or printer drive is downloaded from a computer, such lack of teaching is compensated by Yasuyuki's suggestion in paragraph [0025], wherein the printing program or printer driver can be downloaded from a computer instead of other external device.

Therefore, it would have been obvious to one of ordinary skill in the art to enable the digital camera in Ozawa to download a printing program not only from an external device, i.e., a printer or a remote device, but also from a computer, thereby enhancing user convenience.

Regarding claims 28 & 32, see the analyses of claims 27 & 31 for the external device being a computer. Although Yasuyuki is silent about the computer comprising a modem. An Official Notice is taken that such a modem for the computer is well known

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in the art for the computer to communicate with other devices in a network using a cheap and existing phone line or cable network in a convenient fashion.

Therefore, it would have been obvious to one of ordinary skill in the art to implement a modem in the computer for communicating with other devices in a network using a cheap and existing phone line or cable network in a convenient fashion.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Tran whose telephone number is (571) 272-7371. The examiner can normally be reached on Monday - Friday, 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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A handwritten signature in black ink, appearing to read 'Nhan T. Tran'. The signature is fluid and cursive, with the first letter 'N' being particularly large and stylized.

NHAN T. TRAN
Patent Examiner